S. J. Kiraly

Psychological Effects Of The Threat of Nuclear War

SUMMARY

Systematic studies are emerging on the prevailing harmful psychological effect of the threat of nuclear war. The most recent surveys have identified populations which are particularly vulnerable. Anxiety was found to be a factor in criminal behavior, and threat of nuclear war to be a factor in anxiety. Psychiatric morbidity has been correlated with work deprivation and threat of annihilation. Many studies have focused on children, finding that anxiety about social issues is high, but that cynicism and apathy set in rapidly. Conclusions from such studies show that denial and avoidance are some of the worst results, since they are a barrier to meaningful reaction. The most vulnerable groups are children, adolescents, the unemployed, and those responsible for the welfare of others. Appropriate action is seen to be acknowledgement of fear and disillusionment as valid feelings, education towards a stronger sense of reality, and mobilization of goal-directed activity. (Can Fam Physician 1986; 32:170-174.)

SOMMAIRE

On effectue des études systématiques sur les effets psychologiques nocifs engendrés par la menace d'une guerre nucléaire. Les enquêtes les plus récentes ont identifié les populations les plus particulièrement vulnérables. On a constaté que l'anxiété était un facteur de comportement criminel et que la menace d'une guerre nucléaire était un facteur d'anxiété. Il existe une corrélation entre la morbidité psychiatrique et le chômage et la menace d'anéantissement. De nombreuses études ont porté sur les enfants et ont constaté un niveau d'anxiété élevé autour des grands problèmes sociaux, et que cynisme et apathie s'installaient rapidement. Les conclusions de ces études révèlent que la négation et l'évitement donnent les pires résultats puisqu'ils constituent une barrière à une réaction sensée. Les groupes les plus vulnérables sont les enfants, les adolescents, les sans emploi et ceux qui sont responsables du bien-être des autres. On constate que l'action la plus appropriée comprend la reconnaissance de la crainte et de la désillusion comme étant des sentiments valides, l'éducation pour développer un sens de la réalité plus marqué et la mobilisation vers des activités qui ont un but.

Key words: Psychopathology, nuclear war, prevention

Dr. Kiraly practices psychiatry in Toronto. Reprint requests to: 600 Sherbourne St., Suite 512, Toronto, ON. M4X 1W4.

"How long have we to wait before man turns pacifist?"
Sigmund Freud to Albert Einstein, 1932.[1]

FIFTY YEARS after the establishment of diplomatic relations between the U.S. and the U.S.S.R., we are still threatened by the possibility of a world war.

Much has been written in the medical, sociological, economic, and military literature about preparation for and consequences of nuclear war. Much less has been published on the possible ill effects of the constant threat of large scale self extermination. Likewise, mental health professionals tended to analyze the causes and perpetuating factors of the arms race itself instead of dealing with the strong possibility that harmful psychological effects already existed.

Studies on Psychodynamics Of The Nuclear Arms Race

In 1964, the Group for the Advancement of Psychiatry published a report which focused more on the psychosocial aspects of preventing nuclear war than on the possible psychopathological effects of the threat of annihilation.[2] Eight years later, a similar task force report by the American Psychiatric Association devoted much more attention to the psychopathological impact on adults and families.[3]

Frank[4] admonished that nuclear warfare had no historical precedent, yet people and their national leaders confronted nuclear war with psychological attitudes derived from prenuclear times, such as stereotyping the enemy. He attacked the notion that

MAD (Mutual Assured Destruction) promotes security, urging the pursuit of goals that would breed harmony and cooperation instead of divisiveness. He considered psychological factors like the seductive glamor of weapons, symbolization of power and military planners' formation of self-fulfilling prophecies.

Barnet[5] reviewed the recent history of the U.S. military buildup and scrutinized its rationalizations, concluding that as a means of making the nation's citizens more secure, reliance on nuclear armaments was counterproductive.

Masserman[6] urged the profession to fulfill its obligation to humanity in crisis by countering atavistic delusions that modern warfare could be fought and won like prenuclear wars. He appealed to man's need for survival and harmony, urging prevention of mass suicide primarily through education and fostering of cross cultural tolerance. Resolutions against nuclear war were adopted or endorsed by the Forum of the American Psychiatric Association, the Council of the American Orthopsychiatric Association, the American Association for Social Psychiatry, the House of Delegates of the American Medical Association, the International Psychoanalytic Association and the World Association for Social Psychiatry.

At about the same time, both the Canadian Medical Association and the Canadian Psychiatric Association resolved to denounce nuclear warfare and all preparations that could make it possible. These and other medical bodies worldwide, including some in the Soviet Union, did not foster illusions about medical aid for survivors of a nuclear war. This phenomenon represented an intuitive social movement which was timely but was not a direct result of scientific investigations, although Masserman did use statistical arguments. The appeal was political and had weight in a social rather than a scientific sense.

In a psychoanalytically oriented communication, Kubacki[7] drew parallels between the irrationality of machismo male chauvinism and the nuclear competition, describing the dynamics as narcissistic, paranoid and immature. He found it noteworthy that women were increasingly in the forefront of recognizing and attempting to reverse the lethal trend. In another commentary, the same author[8] focused on the dynamics of suicidal behavior and mankind's propensity for denial of the threatening unknown. The psychodynamic theory advanced was heuristic in nature.

Sommers[9] also explored the psychological factors which propagate the nuclear arms race, emphasizing denial as the most important defense mechanism.

Psychological Effects of The Threat of Nuclear War

Kimmel[10] examined the role of anxiety in criminal behavior and identified the threat of nuclear war as a source of stress and anxiety for adults in correctional settings before and after release into society. He considered crimes such as forgery, embezzlement, sexual crimes, violence and family abandonment in non-psychopaths. As preventive treatment, he recommended that counseling be available to the former subgroups to enable them to deal with these anxiety-laden issues both in and out of prison.

Masserman[11] described the chain reaction of health breakdown which was set in motion when man's basic needs were threatened. He blamed the arms race for economic hardship causing unemployment and a deterioration in group morale and individual and national self esteem, correlating psychiatric morbidity with work deprivation, as did Brenner[12] who reported that a 1% rise in unemployment was associated with a 5.7% rise in crime rate, 3.4% more hospital admissions and 4.1% increase in suicides.

Other psychiatrists, Lifton,[13] Stern,[14] Dixon[15] and Jones[16] independently evidenced that the threat of nuclear annihilation generated tremendous anxiety which interfered with healthy adaptation and fostered psychiatric illness in a variety of adult populations.

Sommers[9] touched on the dynamics of physicianhood when he considered doctors' need to confront or avoid the phenomenon of death. Other authors have emphasized that it was essential for the physicians' sense of well-being and integrity to feel actively helpful at a time of crisis. Patients expect the physician to represent health and lead the way to it.[17] This explains why many doctors find it difficult to tolerate the prospect of war and are especially outraged by their frustration in effecting prevention.

Studies Involving Children

Direct observation of the effects of social anxiety on children and young families triggered a strong response in the Boston pediatrician Helen Caldicott, who urged that we focus on young families.[18]

Rogers[19] interviewed a random sample of children and was surprised to find that interest decreased when the issue of nuclear war was addressed, but terrorism caused strong, appropriate responses.

Schwebel[20] interviewed 3000 children, who showed spontaneous evidence of pervasive awareness and fear of nuclear war. He concluded that the nuclear threat was a current contributing factor in anxiety and related disorders in youths. Schwebel emphasized the need for educating and guiding youngsters and working with them to reduce their anxiety.

In a more rigorous study by the same author,[21] children's changing perceptions of the nuclear threat were examined by comparing the results of two studies performed more than ten years apart. In 1979, 70% of the sample predicted a serious nuclear incident, while only 44% of the subjects studied in the early 1960s predicted a nuclear calamity. The 1979 subjects were more cynical, and did not convey the same intensity of fear and outrage as did the 1960s subjects. Schwebel urged an action-oriented therapeutic approach to counter psychic numbing and apathy, arguing that an active response from adults would support children's feelings of security and trust in society by providing an appropriate orientation toward external threats. Schwebel's studies were based on large samples with attention towards reducing bias.

Escalona[22] considered the effects of the nuclear threat on middle childhood, with particular emphasis on the extent to which ego strengths and weaknesses were influenced by adult example. He found that prevailing adult responses to pervasive danger such as the nuclear arms buildup shaped children's views of the trustworthiness of society and defined the limits of emotional growth and development. His observations were of 350 children, 70% of whom spontaneously disclosed images relating to nuclear

war.

Mack[23] and Chivian,[24] psychiatrists sponsored by Harvard University and the International Physicians for the Prevention of Nuclear War, conducted interviews with 350 Russian and American school children. Results showed that Soviet children feared nuclear war and seemed more concerned for their own survival than did youths in the West. Of the Soviet children, 99% said they were worried about war compared to 58% for U.S. youths. Only 6% of the Soviets believed they could survive a nuclear war, whereas 22% of American youths felt survival was possible.

In another paper Mack[25] admonished that the buildup of nuclear arsenals worldwide had created a new set of stressful issues of particular concern to mental health workers. Among these were the harmful impact of the arms race on children and adolescents, adults' need to deal with various forms of fantasy and make-believe and in particular, the effect of the nuclear responsibility on those in authority. He also noted the need to find new ways of being therapeutic. Mack's conclusions were in fact preceded by several years of empirical investigations. A more accurate statistical approach would have required a test-retest validation.

Sommers, Goldberg, Levinson, Ross and LaCombe of the Children's Mental Health Research Group at the University of Toronto[26] surveyed 1011 students in grades 6-13 at three Toronto school boards. This study showed that Toronto youngsters aged 12-18, felt that their greatest worry was the threat of nuclear war. Most reported feelings of helplessness and lack of personal influence. Another finding was that this issue was the least talked about in the home. The majority felt that the nuclear threat impacted on their plans for the future, yet neither they, nor their parents had taken action to prevent a nuclear war. The authors speculated that the 10% of adolescents who admitted to daily thoughts about nuclear war may be the most traumatized. Yet the "aware" group was the most optimistic and hopeful that their actions could influence the outcome of the arms race. The "unaware" group felt the most powerless and pessimistic.

Analyzing the results of studies in Canada, the U.S., Sweden, Finland, and the U.S.S.R., and her clinical experiences with families and young patients, Dr. Santa Barbara[27] found that today's youth are profoundly disillusioned and that this affects their capacity for forward planning and responsible living. She urged that we take their feelings more seriously and that we respect and help their efforts to overcome their betrayal. She prescribed "adult responses" which could serve as guidelines for parents, educators and therapists.

The Psychiatric Effects of Nuclear War

Lifton[28] studied survivors of the Hiroshima detonation with a special interest in psychological sequelae, and recently, Vartanyan,[29] a prominent Soviet psychiatrist, summed up these findings. Both authors noted that the overwhelming majority of survivors in Japan suffer from psychoneurological disturbances to this day. They leave little doubt that mental disturbances would present as one of the main long-term after-effects of a nuclear war.

Conclusions and Recommendations

The notion that chronic fear and anxiety have deleterious effects is not new, but the appropriate context for this anxiety is now being recognized and public awareness of its effects on human development and health is increasing. This unprecedented phenomenon is being studied in a responsible manner by clinicians and scientists who are devoting themselves to helping those affected.

Initially, the pediatricians' concern was from a protective, humanitarian point of view. The psychopathologists conceptualized the arms race and its effects on humanity as not only dangerously inhuman, immoral and ignorant but also as psychologically pathological and pathogenic.

Increasing numbers of researchers, especially child specialists are studying the effects of the threat of nuclear war instead of being obsessed with the outcome of an actual nuclear holocaust. Samples are larger and surveys have less bias and more reliability.

The studies cited suggest certain generalizations which urgently require serious consideration and further methodical investigation:

* Children and families are aware of the nuclear threat and the anxiety generated affects their daily lives.
* Adults adapt to the stress of a life threat by avoidance of the issue, denial, make-believe, depersonalization (emotional numbing), regression, rationalization or by becoming anxious, demoralized and depressed (symptom formation).
* Children experience anxiety and irrational attitudes from adults who misrepresent reality to them. Facing the threat of war in a collusively silent adult world, where parents ignore their anxiety, they may become mistrustful, impulsive and sociopathic.
* The threat of nuclear war and the psychological adaptations it engenders contribute to anxiety disorders, family breakdown, criminality, drug abuse and alcoholism.
* Children, adolescents, the unemployed, and those responsible for the welfare of others are the most stressed and vulnerable groups.

Among those familiar with patients' reactions to the seriousness of the matter, a consensus seems to have emerged which suggests the following therapeutic stance for appropriate cases:

* empathic communication and a cognitive approach to validate feelings of fear and disillusionment.
* education and counseling to promote reality testing and a stronger sense of reality.
* assistance in working through grief, as in the psychotherapy of anticipatory grief reactions.
* mobilization of hope and encouragement of meaningful, goal-directed activity.

From the relatively recent proliferation of psychiatric and psychosocial literature, we conclude that there is genuine cause for concern. While efforts to prevent nuclear war continue to be paramount, increasingly more medical concern and psychiatric interest is focused on the victims of the stress induced by the threat of nuclear war.

Since the threat of nuclear warfare is related to nuclear technology which cannot be disinherited, it is important to recognize its prevailing psychological effects. In evolutionary terms these effects must be positive in that they have to lead to higher forms of conflict resolution than adversarial warfare. But in the meantime, for many people, this gross threat to life constitutes an overwhelming insult. To ignore the influx of evidence that there are casual-

ties in this mad psychological warfare is callous and irresponsible behavior. We owe it to our children and to ourselves to learn more about the long-term damaging effects of the threat of nuclear war, even if we believe that there will never be such a war. ◉

Acknowledgements

The author wishes to thank Dr. Frank Sommers, Dr. Brian Morris and Dr. Christopher Ross for their constructive criticisms.

References

1. Freud S. Why war? The complete psychological works of Sigmund Freud. London: Hogarth Press 1954; 12:280.
2. Group for the Advancement of Psychiatry. Psychiatric aspects of the prevention of nuclear war. GAP Report 1964; 5:223-317.
3. American Psychiatric Association. Psychosocial aspects of nuclear developments. APA Task Force Report, Washington DC 1982; No. 20.
4. Frank JD. Pre-nuclear leaders and the nuclear arms race. Am J Orthopsychiatry 1982; 52:630-7.
5. Barnet RJ. Fantasy, reality and the arms race: dilemmas in national security and human survival. Am J Orthopsychiatry 1982; 52:582-9.
6. Masserman JH. Or shall we all commit suicide? (II). Curr Psychiatr Ther 1981; 20:395-401.
7. Kubacki A. Machismo and nuclearism. Can J Psychiatry 1983; 28:158-9.
8. Kubacki A. On the nuclear arms race. Am J Psychiatry 1983; 140:661.
9. Sommers FG. Psychological aspects of the nuclear arms race. Can J Public Health 1983; 74:26-8.
10. Kimmel ME. The age of anxiety: general societal impact and particular effects on criminality. J Psychiatr Nurs Ment Health Serv 1977; 15:27-30.
11. Masserman JH. Psychotherapy in a world nearing nuclear chaos—with special reference to unemployment. Am J Soc Psychiatry 1982; 2:31-3.
12. Brenner MH. Stress: can we cope? In: Time 1983; June 6:56-7.
13. Lifton RJ. Beyond psychic numbing: a call to awareness. Am J Orthopsychiatry 1982; 52:619-29.
14. Stern H. Reconceiving the future. Teachers College Record 1982; 84:509-19.
15. Dixon B. Belief without drugs. Mental Health in Australia 1982; 1:7-17.
16. Jones R. Atomic tension cause of divorce rise. Toronto Daily Star, Aug 6, 1983.
17. Zabarenko RN, Zabarenko L, Pittinger RA. The psychodynamics of physicianhood. Psychiatry 1970; 33:102-18.
18. Caldicott H. Nuclear madness. New York: Bantam Books, 1980.
19. Rogers R. On emotional responses to nuclear issues and terrorism. Psychiatr J Univ Ottawa 1980; 5:147-52.
20. Schwebel M. Effects of the nuclear war threat on children and teenagers: implications for professionals. Am J Psychiatry 1982; 52:608-18.
21. Schwebel M, Schwebel B. Children's reactions to the threat of nuclear plant accidents. Am J Orthopsychiatry 1981; 51:260-70.
22. Escalona SK. Growing up with the threat of nuclear war: some indirect effects on personality development. Am J Orthopsychiatry 1982; 52:600-7.
23. Mack JE. What Russian children are thinking about nuke weapons. New Haven Register, Oct. 19, 1983.
24. Chivian E. The psychological impact on children and families of the nuclear arms race. 61st annual meeting, American Orthopsychiatric Association, Toronto, April 1984.
25. Mack JE. The perception of US-Soviet intentions and other psychological dimensions of the nuclear arms race. Am J Orthopsychiatry 1982; 52:590-9.
26. Sommers FG, Goldberg S, Levinson D, Ross C, LaCombe S. Children's mental health and the threat of nuclear war: a Canadian pilot study. Fourth Congress, IPPNW, Helsinki, Finland, July 1984.
27. Santa Barbara J: Living in the shadow: The effects of continual fear. In: Perry TL, DeMille D Nuclear War: The Search for Solutions. Vancouver: Physicians for Social Responsibility, 1985:93-104.
28. Lifton RJ: Death in life: survivors of Hiroshima. New York: Simon & Schuster, 1967.
29. Vartanyan M: The psychiatric consequences of nuclear war demand its prevention. In: Nuclear War: The Search for Solutions. Vancouver: Physicians for Social Responsibility, 1985:85-92.